

Abstract

An ,magnetoresistive thin-film magnetic head with high corrosion resistance for recording medium having massive capacity is provided by providing a protective film having a thickness of 40 Å or less. Since the distance between the head and the medium is remarkably reduced, the film is suitable for a recording medium having high packing density. The magnetoresistive type thin-film magnetic head is provided, wherein a protective film made of a diamond-like thin film having the composition represented by the following formula: $\text{CH}_a \text{O}_b \text{N}_c \text{F}_d \text{B}_e \text{P}_f$ (where $a = 0 \cdot 0.7$, $b = 0 \cdot 1$, $c = 0 \cdot 1$, $d = 0 \cdot 1$, $e = 0 \cdot 1$ and $f = 0 \cdot 1$, in terms of atomic ratio), and having a thickness of 40 Å or less, is formed on at least the surface of the head contacting a recording medium. Also provided are a method for producing the same, and a magnetic head device using the same.